REMARKS/ARGUMENTS

Claims 1–53 remain in this application.

A. Rejection of the claims under 35 U.S.C. 102

Claims 1–53 are rejected under 35 U.S.C. 102(e) as anticipated by U.S. Pat. No. 5,838,970 to *Thomas*. Independent claims 1, 18, 41, 42, 48, and 49 include as an element an act or a means for associating a true-data attribute according to an associated meta-data attribute, where the true-data attribute and meta-data attribute are in the same profile object. This element is neither expressly nor inherently described in *Thomas*. For at least this reason, the rejection of the claims as being anticipated by *Thomas* is improper and should be withdrawn.

In the present invention true-data attributes are associated with meta-data attributes as part of a solution to the problem of locating up-to-date resources that are scattered among components of a distributed system. *See Specification*, page 6, lines 28–29. Locating these resources presents a formidable challenge in distributed systems that rapidly add new software, equipment and users to the computing environment. *See Specification*, page 6, lines 11–27.

One previous solution to finding up-to-date resources on rapidly changing distributed systems introduces directories that centralize information about the system such as mail address books, printer locations, and public key infrastructure, among other types of information. *See id* at lines 29–32. Unfortunately, these directories do not interact with each other and therefore develop redundant and inconsistent information when implemented on a rapidly changing distributed system. *See Specification*, page 6 line 35 to page 7 line 3.

In order to improve the speed and efficiency with which directories are updated to reflect changes in a distributed system, meta-directories were introduced that unify and centrally manage the disparate directories within the system. *See Specification,* page 7, lines 3–5. Unfortunately, meta-directories handle only a finite range of predetermined data types that cannot be extended. *See Specification*, page 7, lines 25–27. New types of software and hardware on the system that were not

foreseen by the meta-directory developer are difficult to manage with conventional meta-directories. *See id.*

The present invention overcomes the problems with directories and meta-directories on distributed systems by associating meta-data attributes for managing directory information (i.e. true-data attributes) with the true-data attributes. *See Specification*, page 8, lines 12–25. The associated true-data and meta-data may be located in the same object profile. *See id.* This eliminates the need for frequent updates and redesigns of directories and meta-directories in rapidly changing distributed systems because changes introduced by new true-data come with associated with meta-data that helps manage the true-data. *See id* at lines 12–25.

In contrast, *Thomas* describes conventional directories (called "repositories" in the reference) for organizing information about a distributed system similar to the directories described above. *See, e.g., Thomas*, Abstract, lines 1–3 ("An object-oriented computer environment is managed by storing, in a plurality of repositories accessible during the life cycles of objects, information required to initiate object operations."). The repositories are used in *Thomas* to make conventional Common Object Request Broker Architecture ("CORBA") more flexible and adaptable by providing information about user preferences and configuration in object implementation. *See Thomas*, column 3, lines 5–19. The repositories in *Thomas*, like other conventional directories, have to be upgraded by a system administrator. *See id*, column 4, lines 30–37 ("[T]he present development allows software upgrades to be made by an administrator merely changing the contents of appropriate information repositories.").

Though *Thomas* never mentions the terms "true-data" or "meta-data", the Office characterizes Table 4 in the reference as showing a repository with attributes of both true-data in the form of "object types" and meta-data in the form of "object-type entries." *See* Office Action, pages 8–9, section 3. The Office further cites a description of Table 4 in the reference as support for the proposition that the meta-data attributes manage the true-date attributes in the repository. *See id.* The Applicant disagrees with this characterization of Table 4 in *Thomas*.

Table 4 contains "object-type entries" that "contain search parameters and implementation information for various object types." *See Thomas*, column 14, lines 28-35. *Thomas* states that the object-type search parameters contained in the object-type entries "permit the actual executables and libraries used to implement an object operation to be selected based on system needs or user preferences." *See id* (emphasis added). Object-type search parameters, the alleged meta-data, are not applied to other data in Table 4, but instead applied to "actual executables and libraries" outside the Table. Thus, based on the description of these parameters in the reference itself, there is no evidence that meta-data attributes in a table are being used to manage a true-data attribute in that same table.

In contrast, the "search parameters" and "executable information" in Fig. 4 are used to customize the instantiation of a remote object. Hence, this metadata is not used to manage anything in the repository itself, but instead to manage some other object that may or may not even be executed on the same computer. This feature of Thomas actually teaches away from the present invention in that Thomas intentionally, explicitly disassociates the "search parameters" and "executable information" from the managed object by placing this metadata into a separate information repository. Hence, one must access this separate repository before an object instance is created, and whether the correct information is used for a particular object instance will be controlled by the ability to synchronize the various information repositories—precisely one of the problems the instant invention is intended to solve.

The fact that the "search parameters" do not manage the object-type attribute in Table 4 should not be surprising because in *Thomas* a system administrator manages the data stored in the repositories. *See Thomas*, column 4, lines 30–37. There is nothing in the description of Table 4, or *Thomas* as a whole, that suggests associating meta-data with true-data and allowing the meta-data to manage the true-data instead of a user or system administrator.

As noted above, claims 1, 18, 41, 42, 48, and 49 include as an element an act or a means for associating a true-data attribute according to an associated meta-data attribute, where the true-data attribute and meta-data attribute are in the same object profile. This element is neither expressly nor inherently described in *Thomas*. Nor is

this element suggested by the Thomas reference. Claims 2-17, 19-40, 43-47, and 50–53 depend from claims 1, 18, 42 and 49 respectively, and are believed to be allowable for at least the reasons set out above. Moreover, each of the dependent claims is believed to be independently allowable because they call for specific meta-data values that are not shown or suggested in the relied on reference. Accordingly, Applicant requests that the rejection of the claims under 35 U.S.C. § 102(e) over *Thomas* be withdrawn.

B. Conclusion

In view of all of the above claims 1-53 are believed to be allowable and the case in condition for allowance which action is respectfully requested. No fee is believed to be required by this response as determined on the accompanying transmittal letter. Should any other fee be required, please charge Deposit 50-1123. Should any extension of time be required please consider this a petition therefore and charge the required fee to Deposit Account 50-1123.

Respectfully submitted,

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